



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/526,008

02/25/2005

Mitsuo Ishikawara

1204.44837X00

1178

20457 7590 05/06/2008
ANTONELLI, TERRY, STOUT & KRAUS, LLP
1300 NORTH SEVENTEENTH STREET
SUITE 1800
ARLINGTON, VA 22209-3873

EXAMINER

BROWN II, DAVID N

ART UNIT

PAPER NUMBER

4111

MAIL DATE

DELIVERY MODE

05/06/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/526,008	Applicant(s) ISHIKAWARA ET AL.	
	Examiner DAVID N. BROWN II	Art Unit 4111	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>25 Feb 2005</u> . | 6) <input type="checkbox"/> Other: ____. |

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 1-2 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

The specification fails to give proper guidance to the artisan, wishing to apply the method of manufacture an epoxy composition of the instant invention, as to how to one can effectively "simultaneously" introduce "outside air" to the kneader through the supply orifice and the discharge orifice" (emphasis added). Since the discharge orifice section of a kneading device is expected to be highly pressurized, it is unclear how one can effectively introduce "outside air", which presumably has a pressure of around 14.7 psi into the kneading device via the discharge orifice. Any attempt to do so would involve mere guesswork and undue experimentation on the part of the artisan. For these reasons, the specification is deemed not to enable any person skilled in the art to which it pertains or with which it is most nearly connected, or to reasonably convey to one skilled in the art that the inventor(s), at the time the application was filed, has possession of the invention as claimed.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 3-11 rejected under 35 U.S.C. 102(b) as being anticipated by JP 0905228 A (Takasu).

Claim 3 is drawn to a product created by the process of claim 1. This being the case, the process limitation does not provide significant patentable weight as long as the claimed product and product of the prior art are substantially identical. In regard to claim 3, Takasu (paragraph 007) suggests a composition comprising an epoxy resin, a phenol hardening agent (addressing applicant's claim 4) and 76-94 wt% silica powder in the epoxy resin composition (silica being the inorganic filler addresses applicant's claim 5), wherein the composition is used for "semiconductor closure" (paragraph 1).

Takasu also teaches that moisture formed from condensation of volatile gasses creates unwanted voids. Takasu uses decompression in order to remove this volatile component during the kneading process thereby preventing the occurrence of voids (paragraphs 7 and 17-18). As a result, the product formed by is indistinguishable from the applicant product recited in claim 3 as both products are epoxy resins where volatile materials are removed and with reduced amounts of voids.

As for claim 6, the "enclosed" or encapsulated semiconductor produced by Takasu (paragraph 1) meets applicant claim 6. As for composition claim 7, this claim being dependent on process claim 2, the process limitation in claim 2 regarding discharged rate and amount of air being introduced into a kneader does not materially change the characteristic of the kneaded epoxy composition. For this reason, claim 7 as well as claims 8-10 (these claims being dependent on claim 7) are taken to be anticipated by Takasu for the same line of reasoning set forth above. Applicant claim 11 is dependant on claim 4. Claim 11 is rejected as being anticipated by Takasu for essentially the same reason line of reasoning as claims 4 and 6.

Note: Where ... the claimed and prior art products are identical or substantially identical, or are produced by identical or substantially identical processes, the PTO can require an applicant to prove that the prior art products do not necessarily or inherently possess the characteristics of his claimed product. **Whether the rejection is based on "inherency" under 35 USC § 102, on prima facie obviousness" under 35 USC § 103, jointly or alternatively, the burden of proof is the same, and its fairness is evidenced by the PTO's inability to manufacture products or to obtain and compare prior art products."** In re Best, 562 F2d 1252, 1255, 195 USPQ 430, 433-4 (CCPA 1977).

5. Claims 3-11 are rejected under 35 U.S.C. 102(b) as being anticipated by JP 2001-081284 (Tsutomu).

Claim 3 drawn to a product created by the process of claim 1. This being the case, the process limitation does not provide significant patentable weight as long as the product claim and product of the prior art are substantially identical. Claim 4 further limits the product of claim 3. In regard to these claims Tsutomu teaches using an epoxy resin ingredient, a hardening agent, and a silica powder ingredient [paragraph [0010].

Art Unit: 4111

The inorganic filler used is silica powder, and comprises 84% of the total resin [paragraph 0017]. Being that the resin contains an epoxy resin, a hardening (curing) agent, and silica powder (which is an inorganic filler), Applicant claim 4 is addressed. In Tsutomu [0017], there is a teaching of using the resin composition for “semiconductor closure”. This addresses applicant claim 6 and subsequently applicant claim 11. Volatiles are removed via a vent portion of the kneading apparatus thus reducing the amount of voids formed [paragraph 0006]. As a result, the product formed by Tsutomu is indistinguishable from the applicant’s claimed product. Both products are epoxy resins with reduced amounts of voids comprised of the same material. Claims 7, 8, and 9 are anticipated for the same reasons as above. As for claims 5 and 10, as noted above, Tsutomu is incorporating 84% (taken to be in weight) of inorganic material (paragraph 17).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DAVID N. BROWN II whose telephone number is (571)270-5497. The examiner can normally be reached on Monday-Thursday 7:30a-5:00p EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner’s supervisor, Sam Yao can be reached on (571)-272-1224. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 4111

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/DAVID N. BROWN II/
Examiner, Art Unit 4111

/Sam Chuan C. Yao/
Supervisory Patent Examiner, Art Unit 4111